Applicant(s)/Patent under Reexamination Application/Control No. Index of Claims 09/846,483 CHAMBARD ET AL. Examiner Art Unit 1764 Ellen M. McAvoy (Through numeral) Rejected Non-Elected **Appeal** N Cancelled Α Restricted O Objected Allowed Interference Date Claim Date

| 1   | Final        | Origina | 5/17/05      |            |          |              |          |          |          |          |          | Final                  | Origina |          |          |           |                    |         |             |  |          | 1        | <u>.</u> | Origina |          |          |          |          |          |          |          |          |          |
|---|--------------|---------|--------------|------------|----------|--------------|----------|----------|----------|----------|----------|------------------------|---------|----------|----------|-----------|--------------------|---------|-------------|--|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 102   |              | 1       |              | 1          |          |              |          |          | Г        |          |          |                        | 51      | П        | T        | $\neg$    | $\neg$             | ╗       |             | TT   | 7:::     | Г        |          | 101     |          | $\neg$   |          |          |          |          |          | $\neg$   |          |
| 3   |              | 2       |              |            |          |              | Г        |          |          |          |          |                        |         |          | 寸        | 寸         | $\neg$             | 十       | $\top$      | 11   | 7:::     | Г        | 十        | 102     |          |          |          |          | _        |          |          | $\Box$   | $\neg$   |
| 4   104   104     5   55   105     6   106   107     7   56   106     9   55   108     9   59   109     10   10   110     11   61   111     12   62   112     13   63   113     14   64   114     15   65   115     16   66   116     17   67   117     18   68   118     19   69   119     20   70   120     21   71   120     21   71   120     22   72   121     24   74   122     23   77   122     24   74   122     23   77   127     77   122   122     23   77   127     77   127   127     77  |              |         |              |            |          |              |          |          |          |          |          |                        |         |          | 寸        | 寸         | T                  | 十       | 1           | 17   |          | $\vdash$ | _        | 103     |          |          |          |          |          |          | コ        | $\neg$   | $\neg$   |
| 5   |              | 4       | Ι            | 1          |          |              |          |          |          |          |          |                        | 54      |          | $\neg$   | T         | $\neg$             |         | $\neg \neg$ | T  |          | Г        | T        | 104     |          |          |          |          |          |          |          |          |          |
| 6     106     106       7     107     107       8     58     108       9     59     109       10 √     60     1110       11 1     61     1111       12     62     112       13     63     113       14     64     114       15     65     115       16     66     116       17     67     117       18     68     118       19     69     119       20     70     120       21     71     120       22 √     72     122       23 √     73     123       24     74     124       25     75     125       26     76     126       27     72     122       23 √     73     123       24     74     124       25     75     125       26  |              | 5       |              | T          | T        |              |          |          |          |          |          |                        | 55      |          | 一        | $\neg$    | 寸                  | T       | $\top$      |  |          |          |          | 105     |          | $\neg$   |          |          |          |          |          | ヿ        | $\neg$   |
| 7     8     107       8     9     100 √     60       101     60     110     110       111     61     111     111       12     62     112     112       13     63     113     13       14     64     114     144       15     65     65     115       16     66     116     117       18     68     118     118       19     69     119     120       20     70     120     120       21     71     71     121       22     72     122     122       23 √     73     123     124       24     74     124     124       25     75     125     125       26     76     128     128       29     79     129     129       30     80     130     131       31     81 <td></td> <td>6</td> <td></td> <td>İ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>56</td> <td>П</td> <td></td> <td>ヿ</td> <td>T</td> <td><math>\top</math></td> <td>_</td> <td>T</td> <td></td> <td>Г</td> <td><math>\neg</math></td> <td>106</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>П</td> <td>ヿ</td> <td></td>  |              | 6       |              | İ          |          |              |          |          |          |          |          |                        | 56      | П        |          | ヿ         | T                  | $\top$  | _           | T  |          | Г        | $\neg$   | 106     |          |          |          |          |          |          | П        | ヿ        |          |
| Solution   Solution |              | 7       |              |            |          |              |          |          |          |          |          |                        | 57      |          |          | 寸         | T                  | T       | $\top$      |  |          |          |          | 107     |          | コ        |          |          |          |          |          |          |          |
| 9   |              | 8       |              |            |          |              |          |          |          |          |          |                        | 58      |          | T        |           | 1                  | T       |             |  |          | Г        |          |         | T        | $\neg$   |          |          |          |          | T        | ヿ        |          |
| 10  |              |         | Γ.           |            | I        |              |          |          |          |          |          |                        | 59      |          |          | $\neg$    |                    | Т       |             |  |          | Г        |          | 109     |          |          |          |          |          |          | $\neg$   | $\neg$   |          |
| 12  |              | 10      | $\checkmark$ |            |          |              |          |          |          |          |          |                        | 60      |          |          |           |                    |         |             |  |          |          | - 1      | 110     |          |          |          |          |          |          | $\Box$   | $\neg$   | $\neg$   |
| 12  |              |         | П            |            |          |              |          |          |          |          |          |                        | 61      |          |          | ヿ         |                    |         |             |  |          |          | П        | 111     | $\Box$   | $\neg$   |          |          | _        |          | $\Box$   | $\neg$   |          |
| 14  |              |         |              |            |          |              |          |          |          |          |          |                        |         |          |          |           |                    |         |             | П  |          |          |          | 112     |          |          |          |          |          |          | $\Box$   | $\neg$   |          |
| 14  |              | 13      |              |            |          |              |          |          |          |          |          |                        | 63      |          |          |           |                    |         |             |  |          | Г        |          | 113     |          |          |          |          |          |          |          | П        |          |
| 15  |              |         |              |            |          |              |          |          |          |          |          |                        | 64      |          |          | T         |                    |         |             | $\Box$   |          |          |          | 114     |          |          |          |          |          |          | П        | $\Box$   |          |
| 16  |              | 15      |              |            |          |              |          |          |          |          |          |                        | 65      |          |          |           |                    |         |             |  |          |          |          | 115     |          |          |          |          |          |          |          |          |          |
| 17  |              |         | Ш            |            |          |              |          |          |          |          |          |                        | 66      |          |          |           |                    |         |             |  |          |          |          | 116     |          |          |          | -        |          |          |          | $\Box$   |          |
| 19  | <u> </u>     |         | Ш            |            |          |              |          |          |          |          |          |                        |         |          |          |           |                    |         |             |  |          |          |          | 117     |          |          |          |          |          |          |          | $\Box$   |          |
| 120   |              | 18      | Ш            |            | Ĺ        |              |          |          |          |          |          |                        | 68      |          |          |           |                    |         |             |  |          |          |          | 118     |          |          |          |          |          |          | $\Box$   | П        |          |
| 1   |              |         | Ш            |            |          |              |          |          |          |          |          |                        | 69      |          |          |           |                    | $\perp$ | _L_         |  |          |          |          | 119     |          |          |          |          |          | i        |          |          |          |
| 21  |              |         | Ш            |            |          |              |          |          |          |          |          |                        | 70      |          |          |           |                    | $\perp$ |             | $\prod$  |          |          |          | 120     |          |          |          |          |          |          |          |          |          |
| 23 V   73   123   124   124   124   125   125   126   125   126   126   126   126   127   127   127   127   127   127   128   128   128   129   129   130   130   130   131   131   131   131   131   131   131   131   132   133   133   133   133   134   134   134   134   134   134   134   134   134   134   135   135   135   135   135   136   136   137   136   137   137   138   138   138   138   138   138   139   140   140   141   141   141   142   142   142   143   144   144   144   144   144   144   144   144   144   144   145   146   146   147   148   148   148   149   149   149   149   149   149   149   149   149   149   149   1   |              | 21      | Ш            |            |          |              |          |          | Ш        |          |          |                        | 71      |          | $\perp$  |           |                    |         |             |  |          |          | '        | 121     |          |          |          |          |          |          |          |          |          |
| 24     74     124       25     75     125       26     76     126       27     127     127       28     78     128       29     79     129       30     80     130       31     81     131       32     82     '132       33     83     133       34     84     134       35     85     135       36     86     136       37     87     137       38     88     138       39     89     139       40     90     140       41     91     141       42     92     142       43     94     144       44     94     145       46     96     146       47     97     147       48     98     148       49     99     149   | <u></u>      |         | Щ            |            | _        |              |          |          | Ш        |          |          |                        |         |          |          |           |                    |         | 丄           |  | _        | $\Box$   |          | 122     |          |          |          |          |          |          | [        |          |          |
| 25           75           125           126           126           126           126           127           127           127           127           128           128           128           128           128           129           129           130           130           130           130           131           131           131           131           131           131           131           132           132           132           133           133           133           133           134           134           134           134           134           134           134           135           135           135           135           136           136           137           137       <td>L.</td> <td></td> <td>V</td> <td></td> <td></td> <td><math>oxed{oxed}</math></td> <td></td> <td></td> <td>Ш</td> <td></td> <td></td> <td>Ш</td> <td>73</td> <td></td> <td></td> <td></td> <td></td> <td><math>\perp</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>123</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  | L.           |         | V            |            |          | $oxed{oxed}$ |          |          | Ш        |          |          | Ш                      | 73      |          |          |           |                    | $\perp$ |             |  |          |          |          | 123     |          |          |          |          |          |          |          |          |          |
| 26  | <u> </u>     | 24      | L            | _          | L        |              |          |          |          |          |          |                        | 74      | $\Box$   |          |           | $\perp \!\! \perp$ | ┵       |             |  | _        | L.       |          | 124     |          |          |          |          | $\Box$   |          | $\dashv$ | _        |          |
| 27     127     128     128     128     128     128     128     129     129     129     130     130     130     130     131     131     131     131     131     131     131     131     132     132     133     133     133     133     133     133     133     133     133     133     133     134     134     134     134     134     134     135     135     136     136     136     136     136     136     137     137     137     137     138     138     138     138     138     139     140     140     141     141     141     141     141     141     142     142     142     142     143     144     144     144     144     145     145     146     146     146     146     146     146     146     147     148     148     148     148     148     149     149     149     149     149  |              | 25      |              | <u> </u>   | _        |              |          |          |          |          | _        | ш                      | 75      | _        | _        | _         |                    |         |             | Lŀ   | _        |          | _        | 125     |          |          |          |          |          | _        |          |          | _        |
| 28   78   128     29   129     30   80     31   81     32   82     33   133     34   84     35   85     36   86     37   87     38   138     39   89     40   90     41   91     42   92     43   93     44   94     45   96     47   97     48   98     49   99  |              | 26      |              | ᆫ          | L        |              |          |          | Щ        |          | $\dashv$ | Щ                      | 76      |          | _        | _         | _                  | 4       |             | <b>L</b>   | _        | L.       |          | 126     |          |          |          |          | _        |          |          | _        | _        |
| 29   79   129     30   80   130     31   81   131     32   82   132     83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   145     44   94   144     45   96   146     47   96   148     48   98   148     49   99   149  | <u> </u>     | 27      | _            | lacksquare | _        |              | _        |          |          | _        | _        |                        | 77      |          | _        | _         | _ _                | _       |             | $\sqcup \bot$                                    | _        | 上        |          | 127     | _        | $\dashv$ | _        |          | _        | ᆚ        |          | _        | _        |
| 30   80   130   131     31   81   131   131     32   83   132   133     33   84   84   134   134     35   85   135   136   136     37   87   137   137   137   137     38   88   138   138   139   140   140   141   141   141   141   141   141   141   141   142   142   143   144   144   144   144   145   145   146   146   147   147   149   <  |              |         |              | L,         |          |              |          |          | Ш        |          |          |                        | 78      | _        | 4        | _         | _ .                | 4       |             |  | _        | ᆫ        |          | 128     |          | _        |          |          |          | _        | _        | _        |          |
| 31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   88   138     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |              |         | _            |            |          |              |          |          |          |          |          |                        | 79      | -        | _        | _         | _                  | 4       | 4-          | $\sqcup \bot$                                    | _        | ㄴ        |          | 129     | _        |          | _        |          | _        | _        | _        | _        | _        |
| 32   82   '132     33   133   133     34   134   134     35   135   135     36   136   137     37   137   137     38   88   138     39   88   138     39   90   140     41   91   141     42   92   142     43   93   142     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   | _            |         | ļ            |            | <u> </u> |              |          |          | _        | $\dashv$ |          |                        | 80      | $\dashv$ | _        | _         | _                  | _       | 4-          | $\vdash$   | _        | L        |          | 130     | _        | 4        | _        |          | _        |          |          | 4        | _        |
| 33   133   134     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   144     44   94   144     45   95   145     46   96   146     47   97   147     48   98   149  | <u> </u>     | 31      | <u> </u>     |            | <u> </u> |              | _        |          |          | _        | _        | $\vdash$               | 81      |          | _}       | 4         |                    | _       |             | $\sqcup$   | -        | L        |          | 131     | _        | _        | _        |          | _        |          | _        | 4        | _        |
| 34       84       134   <td></td> <td></td> <td>┝</td> <td></td> <td></td> <td>Н</td> <td></td> <td></td> <td><math>\dashv</math></td> <td><math>\dashv</math></td> <td><math>\dashv</math></td> <td> </td> <td></td> <td><math>\dashv</math></td> <td>4</td> <td><math>\dashv</math></td> <td>-</td> <td>_</td> <td>+</td> <td><math>\vdash</math></td> <td></td> <td>⊢</td> <td><u> </u></td> <td>132</td> <td>_</td> <td>-</td> <td></td> <td><math>\dashv</math></td> <td>_</td> <td></td> <td>_</td> <td>4</td> <td>_</td>   |              |         | ┝            |            |          | Н            |          |          | $\dashv$ | $\dashv$ | $\dashv$ |                        |         | $\dashv$ | 4        | $\dashv$  | -                  | _       | +           | $\vdash$   |          | ⊢        | <u> </u> | 132     | _        | -        |          | $\dashv$ | _        |          | _        | 4        | _        |
| 35       85       135   <td>-</td> <td>33</td> <td><u> </u></td> <td>H</td> <td></td> <td>щ</td> <td>_</td> <td>_</td> <td><math>\dashv</math></td> <td>-</td> <td></td> <td>-</td> <td></td> <td><math>\dashv</math></td> <td>-</td> <td><math>\dashv</math></td> <td></td> <td>+</td> <td>+</td> <td><math>\vdash</math></td> <td>-</td> <td><u> </u></td> <td></td> <td>133</td> <td></td> <td>_</td> <td>_</td> <td>- 1</td> <td></td> <td></td> <td>_</td> <td>-</td> <td>_</td>   | -            | 33      | <u> </u>     | H          |          | щ            | _        | _        | $\dashv$ | -        |          | -                      |         | $\dashv$ | -        | $\dashv$  |                    | +       | +           | $\vdash$   | -        | <u> </u> |          | 133     |          | _        | _        | - 1      |          |          | _        | -        | _        |
| 36   37   136   137   137   137   137   138   138   138   138   138   138   139   139   139   139   139   140   140   140   140   141   141   141   141   141   141   141   141   141   142   142   142   142   143   144   144   144   144   144   144   144   145   145   146   147   147   147   147   148   148   148   148   149   | -            | 34      | -            | Н          | _        |              |          |          | $\dashv$ | -        |          |                        | 84      | _        | -        | 4         |                    | +       | +-          | $\vdash$   | -        | <u> </u> | - -      | 134     |          | $\dashv$ | $\dashv$ | $\dashv$ | _        | _        | 4        | -        | _        |
| 37   87   137     38   88   138     39   90   140     41   91   141     42   92   142     43   93   144     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |              |         | -            | H          |          | -            |          |          |          | $\dashv$ | $\dashv$ |                        | 85      | $\dashv$ | -        | -         |                    | +       | ┿           | $\vdash$   | -        | <u> </u> | -        | 135     |          | $\dashv$ | -        | $\dashv$ | 4        |          | -        |          | _        |
| 38   88   138     39   90   139     40   90   140     41   91   141     42   92   142     43   93   144     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   | -            | 27      | <del> </del> |            | Н        | $\vdash$     |          | $\vdash$ |          | $\dashv$ | -        |                        | 00      | $\dashv$ | -+       | $\dashv$  | +                  | +       | +           | $\vdash$   |          | <u> </u> | +        | 136     | -        | $\dashv$ | -        |          |          | -        | $\dashv$ | -+       | $\dashv$ |
| 39   89   139     40   90   140     41   91   141     42   92   142     43   93   144     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   | -            |         |              | -          | Н        | $\vdash$     | -        | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$ | $\vdash$               | 0/      | $\dashv$ |          | +         | +                  | +       | +           | $\vdash$   | -        | <u> </u> | -        | 13/     | $\dashv$ |          |          |          |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
| 40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   | -            |         | <u> </u>     | $\vdash$   | Н        | $\dashv$     |          | $\vdash$ |          | $\dashv$ | $\dashv$ | $\vdash$               | 90      | $\dashv$ | +        | +         | +                  | +       | +           | $\vdash$   | -        | -        | +        | 130     | $\dashv$ | -+       |          |          |          | $\dashv$ | $\dashv$ | $\dashv$ |          |
| 41   91   141     42   92   142     43   93   143     44   94   144     95   145     46   96   146     47   97   147     48   98   148     49   99   149  | $\vdash$     |         | $\vdash$     | -          | $\vdash$ | $\dashv$     |          | -        | $\vdash$ | $\dashv$ | $\dashv$ |                        |         |          | +        | +         | +                  | +       | +           | ╁┼   | -        | -        |          |         | $\dashv$ | -+       |          |          |          | -        | $\dashv$ | $\dashv$ | $\dashv$ |
| 42   92   142     43   93   143     44   94   144     95   145     46   96   146     47   97   147     48   98   148     49   99   149  | <del> </del> | 41      | -            |            | $\vdash$ | $\dashv$     |          | -        | $\dashv$ | $\dashv$ | $\dashv$ |                        | 90      | $\dashv$ | -        | $\dashv$  | +                  | +       | +           | ╁  | -        | <u> </u> |          | 140     | -        | +        | $\dashv$ |          | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
| 43   93   -143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149  | <u> </u>     | 42      |              |            | Н        |              | $\vdash$ | $\dashv$ |          | $\dashv$ | $\dashv$ |                        | 91      | $\dashv$ | $\dashv$ | $\dashv$  | +                  | +       | +-          | ┥  |          | ⊢        | +        | 4 1     | $\dashv$ | -        |          |          |          | -        | $\dashv$ | -+       | $\dashv$ |
| 44 94 144   45 95 145   46 96 146   47 97 147   48 98 148   49 99 149   |              | 43      |              | $\vdash$   | $\vdash$ | -            | $\dashv$ | $\dashv$ | $\dashv$ | -        | ᅱ        | $\vdash \vdash \vdash$ |         | $\dashv$ | $\dashv$ | $\dashv$  | +                  | +-      | +-          | <del>                                     </del> | -        | $\vdash$ | -        | 142     | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
| 45 95   46 96   47 97   48 98   49 99   | -            |         | -            | $\vdash$   | $\vdash$ |              |          | $\dashv$ | $\vdash$ | +        | 닉        | $\vdash$               | 94      | -        | $\dashv$ | +         | ╁                  | +       | +-          | <del>   </del>                                   | -        | ┝        | +        | 144     | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 46 96   47 97   48 98   49 99   |              |         | $\vdash$     | Н          | $\vdash$ |              |          |          | $\dashv$ | $\dashv$ | ┥        |                        |         | $\dashv$ | $\dashv$ | $\dashv$  | +                  | +       | ╁           | <del>                                     </del> | -        | ┝        | +        | 145     | $\dashv$ | $\dashv$ | $\dashv$ |          | -        | -        | $\dashv$ | +        | $\dashv$ |
| 47 97 147   48 98 148   49 99 149   | <u> </u>     | 46      | _            | Н          | $\dashv$ |              |          | $\neg$   | $\dashv$ | $\dashv$ | -        | $\vdash$               |         | $\dashv$ | $\dashv$ | $\dashv$  | +                  | +       | +           | <del>                                     </del> |          | -        | +.       | 146     | $\dashv$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | -        | $\dashv$ | +        | $\dashv$ |
| 48 98   49 148  |              | 47      |              |            | $\dashv$ | _            |          | $\dashv$ | -        | $\dashv$ | =        | <del>  </del>          | 97      | $\dashv$ | $\dashv$ | $\dashv$  | +                  | +       | +           |  | $\dashv$ | ┢        | +        | 147     | $\dashv$ | -+       | $\dashv$ | $\dashv$ | $\dashv$ | ┥        | $\dashv$ | $\dashv$ | $\dashv$ |
| 49 99 149 149   |              |         |              |            |          | 一            | 一        | $\neg$   | _        | +        | $\neg$   |                        | 98      | $\dashv$ | +        | $\forall$ | +                  | +       | +           | -  | -        | $\vdash$ | +.       | 148     | -        | $\dashv$ | -        | -        |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|   |              | 49      | $\Box$       | $\neg$     |          | $\dashv$     |          | $\dashv$ | $\dashv$ | 寸        | 7        |                        |         | 一        | $\dashv$ | $\dashv$  | +                  | +       | +-          | $\vdash$   | -        | $\vdash$ | +.       | 149     | +        | $\dashv$ | +        |          | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|   |              | 50      |              |            |          | $\dashv$     |          | $\dashv$ | _        | _        | $\dashv$ |                        |         | 寸        | 十        | $\dashv$  | $\top$             | 十       | 1-          | $\vdash$   | ١        | Т        |          |         | +        | +        | +        | $\dashv$ | 7        | +        | 十        | $\dashv$ | $\dashv$ |